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June 1964

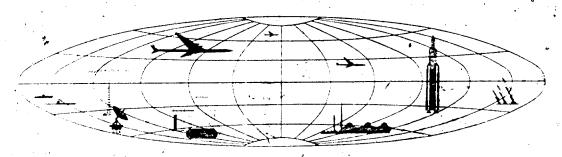
PHOTOGRAPHIC NTERPRETATION REPORT

# SOUTHWEST PROBABLE ANTIMISSILE-MISSILE LAUNCH COMPLEX LENINGRAD, USSR





NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



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### INTRODUCTION

The Leningrad Southwest Probable AMM	earlier small-scale photography. $1/2/$		
Launch Complex at	This report was prepared in response to		
59-43-00N 29-18-30E (Figure 1) was observed	CIA and NSA requirements requesting informa-		
on very good quality nonstereo	tion on the Southwest Complex as observed on		
photography	photography.		
respectively. This	A separate NPIC report (Project No N-642/64)		
photography provides the best coverage to date	will be published on the Northwest Complex,		
of the Southwest Complex and reveals more	which was covered by excellent-quality stereo-		
detailed information than was discernible on	scopic photography		
	<del></del>		

### DISCUSSION

NPIC has arbitrarily assigned a system of designators (Figure 3) to the launch sites and the launch positions within them at the three Leningrad probable AMM launch complexes. These designators will be utilized in future reporting to facilitate reference to specific locations within the launch areas. The launch sites are lettered "A" through "E", in order, in accordance with their locations along the access road as approached from the direction of the entrance to the launch area. The launch positions within each launch site are numbered "I" through "6" in a clockwise direction beginning with the first position to the left as the launch site is viewed from the access road.

All measurements contained in this report are the best obtainable within the current limits of the KH-7 system and exploitation techniques. There being no means in the system for determining camera attitude, precise attitude is unknown and planned attitude is assumed. A full analysis of the metric characteristics of strip camera photography has not been completed. Wherever possible measurements have been cross-checked with collateral information.

Significant new information revealed at the Southwest Complex by the photography includes the identification of a field-type SA-3 surface-to-air missile (SAM) site within the complex proper and the removal of at least three buildings in a previously reported 1/ probable construction support area located along the approach road approximately 4,550 feet east of the complex.

At least four unidentified vehicles were observed in the support area and three in the barracks area on the photography. These were not present in

No other significant changes or additions were observed in the outward appearance of facilities at the complex since it was covered by good-quality smaller scale photography of when interpretation was limited by snow cover and haze.

No missiles or missile support equipment (other than at the SA-3 site) or actual construction activity in progress were identifiable at the complex on the hotography.

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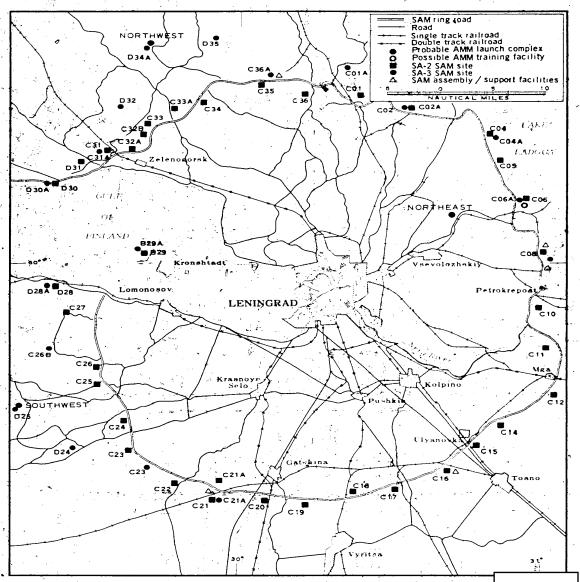
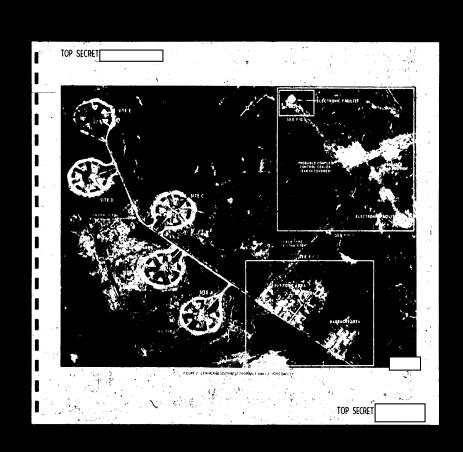


FIGURE 1. PROBABLE AMM LAUNCH COMPLEXES AND SAM INSTALLATIONS NEAR LENINGRAD, USSR.



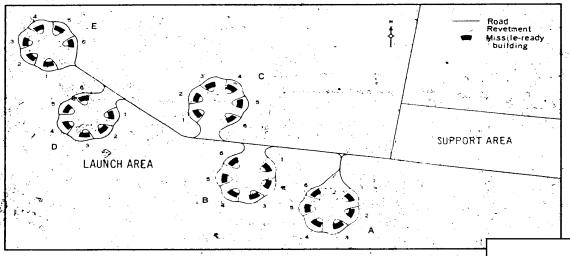


FIGURE 3. EXAMPLE OF LAUNCH AREA DESIGNATIONS.

The six launch positions at each of the five launch sites appear generally alike, although it is not possible to determine their comparative status. Each of the triangular launch positions is revetted, with a circular area light in tone measuring approximately 25 feet in diameter located at the apex (Figure 4). The centers of these circular areas are dark in tone and are considered to be probable launch points. Some are concave in appearance while others appear sto have some height. The missile-ready buildings associated with each launch position are similar in outward appearance. Five openings are visible along the outer and inner sides of many of the buildings on indicating oblique photography that each building contains five bays. Shedlike appendages extend from each end of the buildings on the side away from the site perimeter road. Radials extend part way across the perimeter roads to all building entrances and in some instances are discernible extending from the inner side of the building toward the probable launch point, indicating the probability of rails servicing the launch positions. Unidentified objects appear on the white-toned areas on the perimeter roads between several of the building entrances.

A cylindrical structure is centrally located at each launch site, those at Sites B, D, and E appearing open at the top and those at Sites A, and C covered. They also appear they are in height.

Cables are apparent leading from the cylindrical structures to the vicinity of the launch points at Sites A and C. There are indications that cables may be earth covered at the other sites. A connection between the cylinder and the site control building is visible at Site A.

The launch site control buildings are earth mounded at each site. Two possible vents are visible on top of each mound.

. A	rectangular	object	measurin	g approxi-
mately		is	located	on launch

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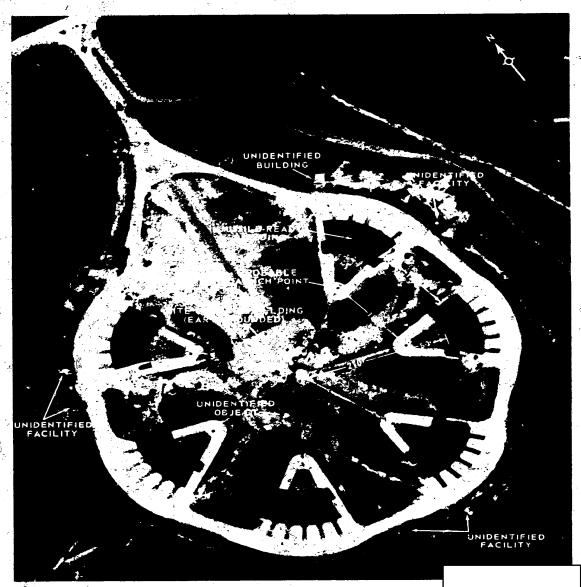


FIGURE 4. LAUNCH SITE A. More nearly vertical photography than that of Figure 2.

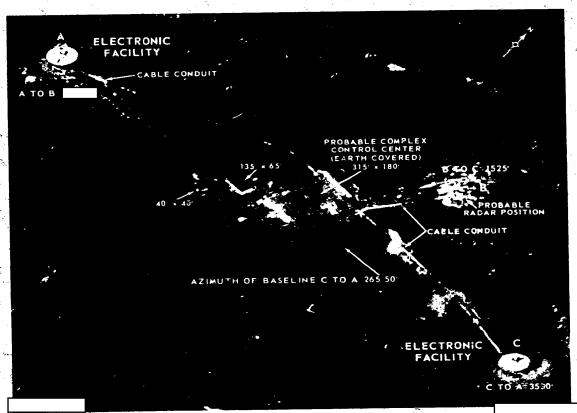


FIGURE 5. ELECTRONIC AREA.

position C4 between the missile-ready building and the probable launch point.

A rectangular building, function under termined, and three areas containing additional unidentified facilities are positioned at regular intervals just outside the perimeter roads of each launch site. A 45- by 40-foot building with an associated small structure is centrally located within the launch area just south of the access road.

Facilities in the electronic area (Figures 5 and 6) are observed in greater detail than on previous photography. No radar antennas have been identified on the current photography.

The electronic facilities northwest and southeast of the Probable Complex Control Center each consist of an elevated circular platform 150 feet in diameter with a centrally located upright tubular structure approximately

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projecting at least 35 feet above, the platform level. These platforms are supported by a girder-type framework. The two facilities are in varying stages of construction. Details of the platform surface cannot be determined from current photography of the Southwest Complex. Dark rectangular patterns on the platforms may be access ways from below. Additional dark images on the platform surfaces remain unidentified.

Construction progress of these facilities since cannot be evaluated on the basis of comparing current photography with 1963 smaller scale photography. Earlier construction chronology was covered in previous NPIC reports. 1/2/

Cable conduits lead from the earth-covered Probable Complex Control Center to the two elevated platforms and also to a probable radar position approximately 450 feet northeast

of the Control Center. The probable radar position consists of a hollow cylinder measuring approximately

in diameter enclosed on three sides by a wall. A tower-mounted unidentified antenna was previously reported 2/ at this location. A reanalysis of earlier photographic coverage of this position in comparison with the current larger scale, better resolution photography does not rule out the possibility that an antenna was at this location when previously reported. Conversely, the feature previously identified as an antenna may have been a crane or the present facility in an earlier construction stage.

A line drawing of the support and barracks areas (Figure 7) is included to show structure-dimensions.

The field-type \$A-3 SAM site is deployed in a clearing just west of the complex support area. Two missiles (approximately 20 feet in

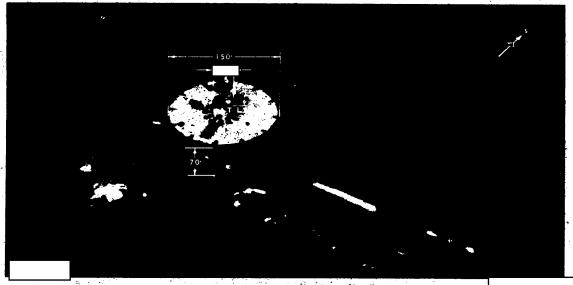


FIGURE 6. ELECTRONIC FACILITY

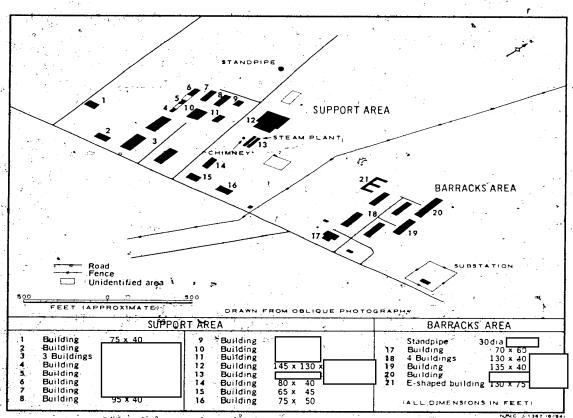


FIGURE 7. SUPPORT AND BARRACKS AREAS.

	length) with an associated probable control	ment were not discernible and probably not
•	van are visible in each of two apparently	present. The launch revetments at the SA-3.
÷	unrevetted positions. At least 14 additional	SAM site located just outside the complex to
	vehicles/pieces of equipment and other un-	the southwest were unoccupied when observed
	identified related activity are located within the	in system to the second of the
	clearing. A recheck of earlier small-scale	The buildings that were dismantled in
	photography reveals that the site may have been	the probable construction support area outside
	occupied Minor earth scarring	the complex were present in
	occurred at this location, between	and probably had been dismantled prior to
ſ	however, vehicles or equip-	

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